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# SG-DEH-70EP-2ÁQÖÚŒË €ÒÚË€HD Portable Dehumidifier with External Pump **Operating Instructions**

V.130424

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### **PACKAGE CONTENTS**

- Dehumidifier
   External Vertical Pump
   3 ft. Dehumidifier Drain Hose
- 16 ft. Pump Drain Hose Drain Joint, 2 Hose Clamps, 2 Screws Use & Care Guide

### WARRANTY

Soleus International, Inc. warrants the accompanying Soleus Air Powered by Gree Dehumidifier to be free of defects in material and workmanship for the applications specified in its operation instruction for a period of ONE (1) year from the date of original retail purchase in the United States.

If the unit exhibits a defect in normal use, Soleus International will, at its option, either repair or replace it, free of charge within a reasonable time after the unit is returned during the warranty period.

As a condition to any warranty service obligation, the consumer must present this Warranty Certificate along with a copy of the original purchase invoice.

#### THIS WARRANTY DOES NOT COVER:

- Damage, accidental or otherwise, to the unit while in the possession of a consumer not caused by a defect in material or workmanship.
- Damage caused by consumer misuse, tampering, or failure to follow the care and special handling provisions in the instructions.
- Damage to the finish of the case, or other appearance parts caused by wear.
- Damage caused by repairs or alterations of the unit by anyone other than those authorized by Soleus International Inc.
- Freight and Insurance cost for the warranty service.
- Filter and Accessories

ALL WARRANTIES, INCLUDING ANY IMPLIED WARRANTY OF MERCHANT ABILITY ARE LIMITED TO ONE-YEAR DURATION OF THIS EXPRESS LIMITED WARRANTY, **SOLEUS INTERNATIONAL INC.** DISCLAIMS ANY LIABILITY FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES AND IN NO EVENT SHALL SOLEUS INTERNATIONAL INC'S LIABILITY EXCEED THE RETAIL VALUE OF THE UNIT FOR BREACH OF ANY WRITTEN OR IMPLIED WARRANTY WITH RESPECT TO THIS UNIT.

This warranty covers only new products purchased from our authorized dealers or retailers. It does not cover used, salvaged, or refurbished products.

As some states do not allow the limitation or exclusion of incidental or consequential damages, or do not allow limitation on implied warranties, the above limitations and exclusions may not apply to you. This warranty gives you specific legal rights, and you may also have other rights that vary from state to state.

#### For Technical Support and Warranty Service

Please Call (888) 876-5387

Or Write To: Soleus International, Inc., 20035 E. Walnut Dr. N., City of Industry, CA 91789 www.soleusair.com, www.soleusgreen.com, www.greeusa.com

### NOTES

# NOTES

### SAFETY INSTRUCTIONS

#### IMPORTANT CAUTIONS FOR USING YOUR DEHUMIDIFIER.



To reduce the risk of fire, electrical shock, injury, or damage to the dehumidifiers, these safety precautions must be followed:

#### Safety

- Do not place the power cord near a heater.
- Do not use an electrical outlet near flammable or combustible materials such as gasoline, propane, paint thinners, etc.
- Do not disassemble or modify dehumidifier parts or components. It may cause electric shock and failure.
- Plug in the power cord properly.
- Do not turn the unit on and off by inserting or pulling out the power plug.
- Do not damage the power cord or use an unspecified power cord.
- Do not modify power cord length.
- Do not share the outlet with another appliance.
- Always plug into a grounded outlet. Not grounding unit may cause electrical shock.
- Unplug the unit if it emits strange sounds, odors, or smoke.
- Do not use an electrical outlet if it is loose or damaged.
- Do not operate or plug in unit with wet hands or in a wet environment.
- Ventilate area before operating dehumidifier. Check for the presence of natural gas
- or the buildup of other combustible vapors. • Do not clean the dehumidifier with water.
- Water may enter the unit and degrade the insulation resulting in an electrical shock.
- If water enters the product, turn off the dehumidifier's power switch, then unplug the unit. Do not plug in unit until it has been inspected by an authorized repair service.
  Because the fan rotates at high speed during operation, always unplug dehumidifier
- before attempting any recommended maintenance or cleaning.Do not block the inlet or outlet. It may cause
- unit to fail or to operate inefficiently.

- Do not remove plug from outlet by pulling on the cord.
- When not in use, turning the unit off will save energy. Unplug the dehumidifier when not using for long periods of time.
- When removing the filter, be aware that some metal parts may have sharp edges and may cause injury.
- Do not use the water collected in the bucket for drinking purposes. It is not sanitary and could cause illness.
- Do not allow children to play with this product.

#### Tips

- Make sure the dehumidifier is the correct size for the area you want to dehumidify. It is not designed to dehumidify the entire house.
- For proper operation, the dehumidifier should only be placed on a level floor.
- Close all doors, windows and other openings to the room. The dehumidifier must operate in an enclosed area to be effective.
- To clean, use a soft cloth; do not use wax, thinners, or strong detergents as they may change the color of the unit or cause surface damage.
- Be sure to replace the bucket properly after emptying to prevent water from collecting on the floor causing damage to some types of flooring.
- Do not put a pet or house plant where it will be exposed to direct air flow. This could injure the pet or plant.
- Operation without filter will cause unit failure. Insert the filter securely. Clean it every two weeks. (See Care and Maintenance section in this manual.)

### ELECTRICAL REQUIREMENTS

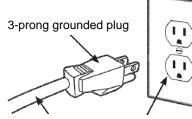
#### OBSERVE ALL LOCAL CODES AND ORDI-NANCES.

DO NOT, UNDER ANY CIRCUMSTANCES, REMOVE THE POWER SUPPLY CORD GROUND PRONG.

# ELECTRICAL GROUND IS REQUIRED ON THIS APPLIANCE

#### A 115-VOLT 60Hz, AC ONLY, 15A FUSED AND PROPERLY GROUNDED ELECTRICAL SUPPLY IS REQUIRED.

A time delay fuse or time delay circuit breaker is recommended. Use a dedicated



Power supply cord Grounded 3-prong electrical outlet

circuit serving only this appliance.

RECOMMENDED GROUNDING METHOD

For your personal safety, this appliance must be grounded. This appliance has a power supply cord with a 3-prong grounded plug. To minimize possible shock hazard the cord must be plugged into a matching grounded electrical outlet that complies with the latest edition of the National Electrical Codes and all local codes and ordinances.

If a grounded 3-prong electrical outlet is not available, it is the personal responsibility and obligation of the customer to have one installed by a qualified electrician.



#### ELECTRICAL SHOCK HAZARD

- Plug into a grounded 3-prong outlet.
- Do not remove the ground pin from the plug.
- Do not use an adapter.
- Do not use an extension cord.
- Failure to follow these instructions can result in death, fire or electrical shock.

### **INSTALLING YOUR DEHUMIDIFIER**

- Install the dehumidifier on a level floor strong enough to support the unit with a full bucket of water.
- For best performance, allow at least 12-18 inches of air space on all sides of the unit for good air circulation.
- Keep all outside doors, windows and other openings closed when operating the dehumidifier. Humid outdoor air will add to the unit's workload.
- Leave the dehumidifier in an upright position for 30 minutes before turning on.

#### DEFROST OPERATION

The dehumidifier has a built-in defrost control that senses frost buildup on the evaporator coils.

During defrosting, the compressor will automatically turn off; the fan will continue running to defrost the coils.

### **EXTERNAL VERTICAL PUMP**

Pump capacity per 24 hours	304 pints per day
Vertical Height Pumping	16 ft.
Power Source	115 V / 60 HZ
Rated Current (Amps)	.12A
Dehumidifier Drain Hose Diameter	.50 in. / 13 mm
Pump Drain Hose Inside Diameter	.20 in / 5 mm

# **ERROR CODES**

Error Code	Error Type	Possible Cause	Corrective Action
F1	Ambient Tem- perature Sensor Malfunction	<ol> <li>Sudden Change in the surrounding temperature.</li> </ol>	<ol> <li>Unplug the dehumidifier.</li> <li>Check the surrounding area for possible reasons for sudden temperature changes.</li> <li>Wait 30 minutes before plug- ging the dehumidifier back in for normal operation.</li> </ol>
F2	Pipe Tem- perature Sensor Mal- function	2. Faulty Sensor	<ul> <li>for normal operation.</li> <li>4. If the "Error" is still indicated, please contact your nearest service center. Call (888) 876- 5387 for service center locations.</li> </ul>

# **PRODUCT SPECIFICATIONS**

ITEM #	SG-DEH-70EP-2
Reference Number	DP2-70EP-03
Moisture Removal per 24 hours	70 Pints per day (32.9 Liters per day)
Power Consumption (W)	745 Watts
Bucket Capacity	17 Pints (8 Liters)
Power Source	115 V / 60 HZ
Rated Current (Amps)	7.3A
Sound Pressure Level dB (L/M/H)	45/47/49 dB(A)
Weight Ibs	47.7
Dimensions (W x D x H)	15.125" x 11.5" x 24.125"

#### CHOOSING THE PROPER LOCATION

Use the dehumidifier:

- in the basement to help prevent moisture damage.
- in the kitchen, laundry room, bathroom, and spa/exercise areas that have excessive moisture.
- to prevent moisture damage anywhere books or valuables are stored.
- during construction or remodeling to reduce drying time for drywall and paint. However, check and clean filter often.

#### AUTOMATIC SHUT OFF

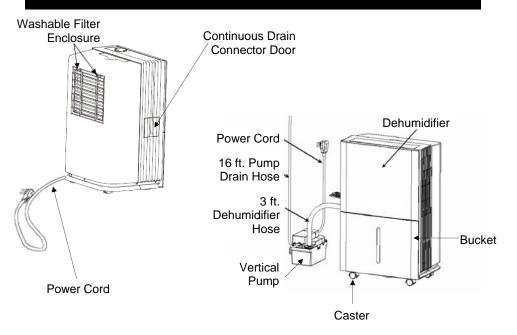
- When the bucket is full, or when the bucket has been removed, the compressor will automatically stop. The fan will continue to run to dehumidify for 3 minutes. Then the Bucket Full indicator will flash and you will hear a ten second audible alarm.
  - The bucket must be placed in the proper position for the dehumidifier to work. The Bucket Full light will flash and the dehumidifier will not run if the bucket is not in the proper position. Dehumidifier settings can not be changed when the bucket is not in its proper position.
- The dehumidifier fan will shut off in 3 minutes, once the desired humidity setting is reached plus or minus 5% Relative Humidity (RH).

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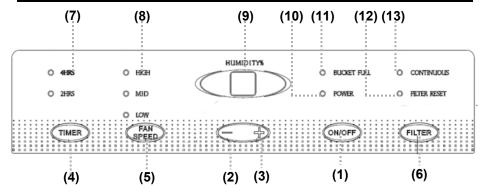
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To reduce the risk of fire, electric shock or injury to persons, read the important SAFETY IN-STRUCTIONS found on page 3 before operating this appliance.

# **KEY FEATURES**



### **CONTROL PANEL**



#### POWER ON/OFF (1)

Once the unit is plugged in, the POWER INDICA-TOR (10) will light. Pressing the POWER button once will turn the unit ON and illuminate the digital display (9). The fan will operate for 3 minutes to draw air through the dehumidifier to properly sense relative humidity. The display will show the humidity level of the room in 5% increments, down to a minimum of 25%. Pressing the Power button again will turn the display OFF and the unit will cease operating.

#### HUMIDITY LEVEL (2/3)

The humidity level can be set in 5% increments in a range from 35% to 80%. The humidity setting is shown in the digital display. When the humidity level of the room reaches the set level, the compressor will stop, but the fan will continue operating for 3 minutes. To set the unit to continuous operation, press the "-" (2) arrow button until the display shows 35%. Press again and the display will show CO. The Continuous indicator (13) will light up on the control panel. To leave continuous operation, press the "+" (3) arrow. To check the current humidity setting, press the "+" and "-" arrow. The display will show and set 5% above or below the current settings.

#### FAN SPEED (5)

Press Fan Speed to toggle between Low, Med, and High fan speeds. Speed will be shown in **FAN SPEED INDICATOR (8)** 

#### **BUCKET FULL INDICATOR (11)**

When the collection bucket is full, the **BUCKET FULL indicator (11)** will light up and you will hear an audible alarm. The audible alarm will last up to ten seconds The dehumidifier will not run until the bucket is removed, emptied and replaced.

#### **DELAY START (4)**

Unit can be programmed to turn on at a desired delay time by pressing the **Timer (4)** key. When the unit is powered **OFF**, press the timer key once for 2-hour delay start. The **2 Hrs (7)** timer indicator will light up when the timer key is pressed. Press the timer key once more for a 4-hour delay start. The **4 Hrs (7)** timer indicator will now light up. Press the timer key a third time to clear the timer setting. No timer indicators will light up when the timer setting is cleared.

#### AUTO SHUT-OFF (4)

Unit can be programmed to turn off at a desired time by pressing the **Timer (4)** key. When the unit is powered **ON**, press the timer key once for 2hour automatic shut-off. The **2 Hrs (7)** timer indicator will light up when the timer key is pressed. Press the timer key once more for a 4-hour automatic shut-off. The **4 Hrs (7)** timer indicator will now light up. Press the timer key a third time to clear the timer setting. No timer indicators will light up when the timer setting is cleared.

#### FILTER RESET (12)

The **FILTER RESET indicator (12)** will light up when the filter needs cleaning. Remove the filter and clean accordingly. Replace the filter when finished and press and hold the **FILTER (6)** key up to 5 seconds to reset the filter indicator. **IMPORTANT:** 

- Once the set humidity level is reached, the compressor will shut off. The fan will continue to run for up to 3 minutes.
  - Anytime the compressor stops running for any reason, it will not restart for a minimum of 3 minutes. This is a design feature to protect the compressor from damage.

### **TROUBLESHOOTING (Cont.)**

Problem	Possible Causes	Solutions
Dehumidifier runs too much	The area to be dehumidified is too large.	The capacity of your dehumidifier may not be adequate for the room size.
	Doors and windows are open.	Close all doors and windows to the out- side.
Frost appears on the coils	The dehumidifier has recently been turned on or the room temperature is below 41°F.	This is normal. Frost will usually disappear within 60 minutes.
Controls cannot be set	Bucket is full or it has been removed.	Empty bucket and install properly in unit.
Fan Noise	Air is moving through the unit.	This is normal.
Water on the floor	Hose connection may be loose.	Check the hose connection. See the Drain- age Section
	Hose is attached but not draining into a drain	Disconnect the hose if using the bucket or place the hose near a drain.
Unit is discharging warm air		Normal: Compressor and electric motor discharge nominal heat.
Water does not drain through the dehumidifier drain	Check the drainage joint and hose on the dehumidi- fier. Is it installed correctly?	Re-install the dehumidifier drainage joint and hose according to the manual.
hose	Check the drain hose for kinks or obstructions.	Flatten the hose or remove blockage.
Water does not drain through the pump drain hose	Check the pump drain hose on the pump. Is it installed correctly?	Re-install the pump drain hose according to the manual.
	Check the pump drain hose for kinks or obstruc-tions.	Flatten the hose or remove blockage.

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# TROUBLESHOOTING

Problem	Possible Causes	Solutions
Dehumidifier does not start.	The dehumidifier is un- plugged.	Make sure the dehumidifier's plug is pushed com- pletely into the outlet.
	The fuse is blown / circuit breaker is tripped.	Check the house fuse / circuit breaker box and replace fuse or reset breaker.
	Dehumidifier has reached the user set humidity level or the bucket is full.	The dehumidifier automatically turns off when either condition occurs. Change to a lower setting or empty the water bucket and replace properly.
	Bucket is not in the proper position.	The bucket must be in place and securely seated for the dehumidifier to operate.
	Power Failure.	There is a protective time delay of 3 minutes to prevent tripping of the compressor overload. For this reason, the unit will not start normal dehumidifica- tion for 3 min. after it is powered back on.
Dehumidifier is not oper- ating as Intended.	Not enough time allowed for unit to remove moisture.	When first installed, allow at least 24 hours to achieve the desired humidity level.
	Airflow is restricted.	Make sure there are no curtains, blinds, or furniture blocking the side or back of the dehumidifier.
	Dirty filter.	See the Cleaning The Air Filter section
	The user set Humidity Level may not be set low enough.	To reduce moisture, press the down arrow button to lower the percent humidity desired in the room, or set the dehumidifier to <b>CO</b> for continuous operation.
	Doors and windows may not be closed tightly.	Check that all doors, windows, and other openings are securely closed.
	Water is not draining through drain hose	Make sure the drain is placed below the drain con- nector nozzle to allow gravity to drain the water (Refer to Gravity Drain Hose section in this manual).
	Room temperature is too low.	Moisture removal is best at higher room tempera- tures. Lower room temperatures will reduce the moisture removal rate. This model is designed to operate at temperatures above 41°F.
Filter Indicator is lit.	Filter needs to be cleaned every 250 hours of use.	Once filter has been cleaned, press the FILTER but- ton for 3 seconds to turn the filter indicator off.

# WATER DISPOSING OPTIONS

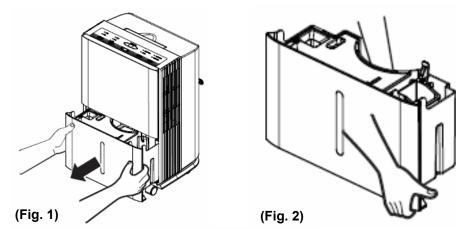
#### **OPTION 1: EMPTYING MANUALLY**

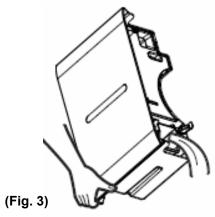
- 1. Pull out the bucket, grasping the side handles. (Fig. 1)
- 2. Carry the bucket by grasping the front corner of the bucket with one hand and the back of the bucket with the other hand( Fig. 2)
- 3. Empty the bucket and replace the bucket in the dehumidifier. (Fig. 3)

NOTE: Dehumidifier will not work and settings can not be changed when the BUCKET FULL indicator light is flashing or without the bucket properly installed.

#### DO NOT REMOVE THE STYROFOAM IN THE BUCKET

This dehumidifier is equipped with a reliable Styrofoam float system. The Styrofoam located inside the float in the bucket is essential to the bucket full system working properly. Do not remove the Styrofoam from the float.





# INSTALLING THE GRAVITY DRAIN HOSE

#### **Option 2: GRAVITY DRAIN HOSE**

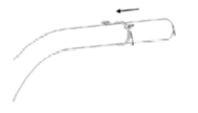
Step 1: Open the drain connector door. (Fig. 6)



Step 2: Install and secure the drainage joint onto the drain connector. (Fig. 7)



Step 3: Place large hose clamp on the flat end of the dehumidifier drain hose. (Fig. 8)



(FIG. 8)

# CARE AND MAINTENANCE

#### CLEANING THE AIR FILTER

After 250 hours of operation the **FILTER RESET** indicator will light up to remind you to clean and change the air filter.

It is recommended to periodically check the filter for excess dirt even if the **FILTER RESET** indicator is off.

- To remove the air filter, press the two filter tabs and pull the filter holder away from the back of the unit.
- 2. Remove the filter and clean with warm, soapy water. Rinse and allow the filter to dry before placing back in the unit.
- Place the filter back into dehumidifier. Plug unit back into outlet, power the unit on and press and hold the FILTER key up to 5 seconds on the control panel to reset the filter setting.

**NOTE:** DO NOT place the filter in a dishwasher

**CAUTION:** DO NOT operate the dehumidifier without a filter. Doing so may cause a unit failure.

#### FILTER TABS





 Disconnect power supply cord from receptacle before performing any maintenance.

#### **CLEANING THE EXTERIOR**

Clean the cabinet using a damp cloth and a mild detergent. Do not use bleach or abrasives.

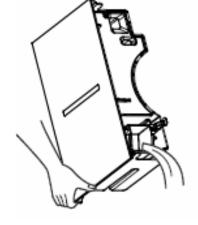
#### CONTROL PANEL

Wipe down the control panel with a dry cloth.

#### CLEANING THE BUCKET

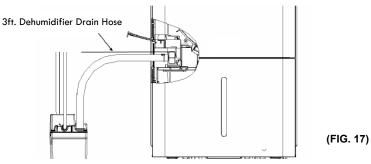
Every few weeks, clean the dehumidifier bucket. Partially fill the bucket with clean water and mild detergent. Swish the mixture around in the bucket, empty and rinse. Replace the bucket when finished

**NOTE:** Do not place the bucket in a dishwasher.

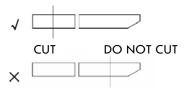


### **USING THE PUMP**

**NOTE:** Make sure the drain hose is lower than the horizontal plane of the drain on the dehumidifier as seen in the illustration below. Drain hose should be as short as possible and all kinks in the drain hose should be eliminated for proper pump operation.



**NOTE:** If you need to cut the dehumidifier drain hose, only cut on the flat end of the hose. Do not cut the angled end as it is designed for insertion into the pump.



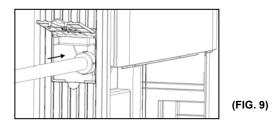
- 1. Remove flat end of the hose by squeezing the large clamp and pulling it toward you.
- 2. Remove hose from drainage joint and cut hose to appropriate length.
- 3. Once cut is completed, refer to installing the Drain Hose to re-install dehumidifier drain hose.

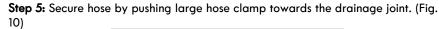
#### USING THE DRAIN PUMP

- 1. Plug into grounded electrical outlet.
- 2. Place the other end of the pump hose where you would like to empty the water (floor drain, water container or through a basement window). The pump will automatically start and begin pumping the water that drains into it. Check hose for kinks or other obstructions.
- 3. Before and after each use, check hose connections to make sure they are properly secured.

# **INSTALLING THE GRAVITY DRAIN HOSE**

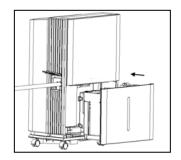
Step 4: Insert the drain hose onto the drainage joint so that it is fully seated. (Fig. 9)







Step 6: Place bucket in the dehumidifier for operation. (Fig. 11)



(FIG. 11)

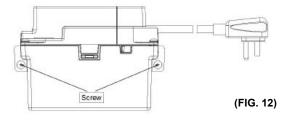
# INSTALLING THE EXTERNAL PUMP

#### **OPTION 3: EXTERNAL VERTICAL PUMP**

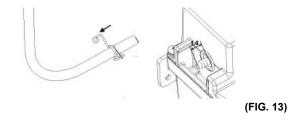
#### INSTALLING THE EXTERNAL PUMP

**Step 1:** To install Dehumidifier Drain Hose, refer to Gravity Drain Using Dehumidifier Hose instructions starting on page 9.

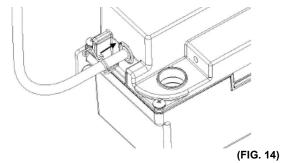
**Step 2:** For optimal operation, it is recommended that the pump is placed on a flat and level location. Attach the water pump to a wall or other perpendicular flat surface with the included screws for security. (Fig. 12)



**Step 3:** Remove red cap from drain hose connector on pump. Attach the small drain hose clamp onto the pump drain hose. (Fig. 13)



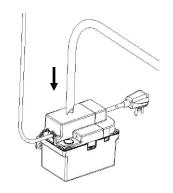
**Step 4:** Insert pump drain hose onto pump connector until it is fully seated. Secure hose by pushing small clamp forward towards the pump. (Fig. 14)



**Step 5:** Secure hose by pushing small clamp forward towards the pump. (Fig. 15)



**Step 6:** Insert the angled end of the dehumidifier drain hose into the water pump tank. (Fig. 16).



(FIG. 16)